

THE ADOLESCENT BRAIN COGNITIVE DEVELOPMENT STUDY

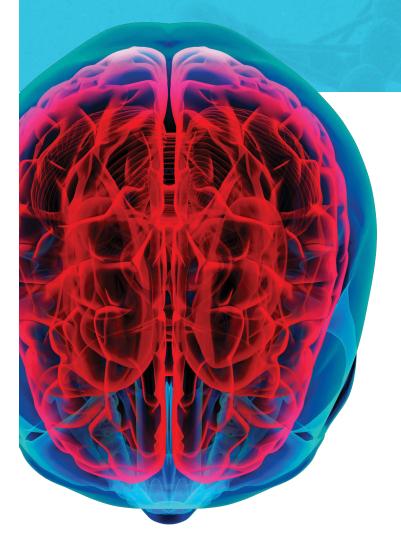
WHAT IS THE ADOLESCENT BRAIN COGNITIVE DEVELOPMENT STUDY?

The Adolescent Brain Cognitive
Development (ABCD) Study is a landmark
study being conducted by the National
Institutes of Health (NIH) on the effects of
adolescent substance use on the developing
brain. Lessons learned from this project will
guide future tobacco, alcohol, and drug
prevention and treatment efforts.

HOW WILL THE ABCD STUDY BE IMPLEMENTED?

Unique in its scope and duration, the ABCD study will:

- Recruit 10,000, ages 9 to 10, before they initiate drug use
- Follow them over 10 years into early adulthood to assess how substance use affects the trajectory of the developing brain
- Use advanced brain imaging as well as psychological and behavioral research tools to evaluate brain structure and function
- Track substance use, academic achievement, cognitive skills, and mental health over time



WHY DO WE NEED THE ABCD STUDY?

Alcohol, marijuana, tobacco, and other drugs are widely used by youth, and this use can pose short- and long-term health and safety risks. Because brain development continues into the twenties, there remain important questions about how substance use among youth will affect them later in life.

- Evidence suggests that substance use has long-term effects on the developing brain.
- Advances in neuroimaging allow us to study the brain in greater detail.
- Adolescents today are drinking more alcohol when they binge and have access to higher potency marijuana and greater varieties of nicotine delivery devices than previous generations.
- Changes in state and local policies, particularly with respect to marijuana, may impact public health.

WHAT QUESTIONS WILL THE ABCD STUDY ADDRESS?

The size and complexity of the ABCD study will allow scientists to address key questions:

- What is the impact of occasional versus regular use of marijuana, alcohol, tobacco, and other substances, alone or in combination, on the structure and function of the developing brain?
- How does the use of specific substances impact the risk for using other substances?
- What are the brain pathways that link adolescent substance use and risk for mental illnesses?
- What impact does substance use have on physical health, psychological development, information processing, learning and memory, academic achievement, social development, and other behaviors?
- What factors (prenatal exposure, genetic, familial, demographic, etc.) influence the development of substance use and its consequences?

WHO IS LEADING THE ABCD STUDY?

The ABCD study is led by the Collaborative Research on Addiction at NIH (CRAN):

- National Institute on Drug Abuse (NIDA)
- National Institute on Alcohol Abuse and Alcoholism (NIAAA)
- National Cancer Institute (NCI)

Collaborators include:

- Eunice Kennedy Shriver National Institute of Child Health and Human Development
- National Institute of Mental Health
- National Institute of Minority Health and Health Disparities
- National Institute of Neurological Disorders and Stroke
- Office of Behavioral and Social Sciences Research
- · Office of Research on Women's Health

For more information, visit:

www.addictionresearch.nih.gov/adolescent-brain-cognitive-development-study

